SECTION VII.
Engineering Subcontracts

Some of the issues identified for firms pursuing construction subcontracts (Section V) also pertain to engineering firms seeking subconsulting work. However, different processes apply when competing for public sector engineering prime contracts or subcontracts.

Qualitative Information on Subcontracting in the Transportation Engineering Industry

The study team collected qualitative information concerning potential barriers to MBE/WBE participation as subconsultants through interviews with minority-, women- and majority-owned firms, interviews with trade associations and questions in the Availability Survey.

Focus on public sector subconsulting. MBE/WBEs often participate as subconsultants rather than prime consultants in public sector work for several reasons:

- A trade association representative observed DBEs tend to specialize and establish niche practices such as environmental engineering. The interviewee concluded that DBEs end up working as subconsultants to larger, more generalized engineering firms.
- Both MBE and majority-owned engineering-related firms complained that ITD projects are too large, which may limit opportunities for smaller firms.
- Some firms complained that certain engineering work was bundled into large construction contracts (and urged ITD to unbundle the engineering-related work).
- A number of firm owners said that there are more subcontracting opportunities on public sector engineering contracts than in the private sector. Engineering firms indicated that they less frequently subcontract work on private sector jobs.

Some engineering firms reported that they started as subconsultants to large engineering firms but have grown to the point that they now pursue small prime contracts. Some MBE/WBEs are also very successful in the private sector. One MBE consultant said that after he was DBE certified he had so much private sector work that he did not actively pursue ITD subcontracts.

Section VIII discusses some of the barriers that steer some firms to initially compete as subconsultants rather than as primes on public sector work.

Opportunities to work as a subconsultant on an ITD engineering project. Firms can obtain subcontracts by responding as part of a team to an ITD Request for Proposal or being used as a subconsultant by a firm that has received a task order under a term agreement.

Other than proper licensing, there are few other requirements to work as a subconsultant on an ITD engineering contract. The process used to select prime consultants for term agreements described in Section VIII does not apply for subconsultants working for firms that obtain task orders. However, one MBE consultant said that primes will look for firms that have term agreements for certain disciplines when selecting subconsultants for a project.

Methods to identify subcontracting opportunities. Similar to the process for advertising construction contracts discussed in Section V, ITD publishes requests for proposals (RFPs) in newspapers, a monthly ITD newsletter and on the ITD website. There is no established process, however, of learning about any subcontracting opportunities on ITD task orders.

ITD received some positive and some negative comments from in-depth interviews on its efforts to make opportunities known to engineering-related firms. One consultant reported that there is "no way to find out what is coming down the pipeline …. We have to call each of the districts and have a face-to-face with project development engineer and they will tell us about the projects." ITD should "sit down with 30 consultants and review the same information" with each one. She also recommended posting upcoming design projects on the ITD website.

A relatively large number of transportation engineering firms interviewed in the Availability Survey commented on the difficulty in obtaining information on bidding opportunities and bidding on ITD projects. Minority-owned engineering firms were more likely than other firms to identify this as a problem.

Prime consultant solicitation of subconsultants for bids. Prime consultants are currently under no obligation to solicit bids from subconsultants for any ITD engineering-related contracts. Prior to discontinuing the program, ITD established DBE project goals for certain Requests for Proposals and required documentation of good faith efforts to meet the goal for primes that did not reach the target level of DBE participation. No contract goals were applied to task orders awarded under the term agreement system.

Effect of the past DBE contract goals. A number of MBE/WBE engineering firms reported that the DBE Program and project goals were very important to the early success of their businesses. For example, [the DBE Program] "was invaluable to us … I couldn't have survived without it. If I were starting a firm right now I couldn't do it." Now that her firm is well-known in her area, this business owner says that primes continue to solicit her for public and private sector work.

An MBE firm reported that the absence of an incentive to use DBE companies creates an obstacle for new DBE firms who were not "in the system" before January 2006. A DBE company certified before that, time may have established connections through the DBE Program and have the advantage of prior experience.

A WBE firm recalled several isolated incidents in which she felt her gender affected her ability to obtain work. She concluded, "If I didn't have the DBE hook to break the ice, I wouldn't have gotten in." She stated that it is difficult to get your foot in the door, but once you do and provide good work, you are going to be a success.

Other interviewees reported that large engineering firms will just do the previously subcontracted work themselves now that they don't have to meet DBE goals.

A relatively large percentage of minority-owned transportation engineering firms interviewed as part of the Availability Survey mentioned difficulty in obtaining subconsulting opportunities.

One majority-owned engineering firm thought that the old DBE program gave unfair advantage to DBEs. He stated that the DBE Program should be disbanded and the ITD bidding process be strictly qualifications-based.

Frequency of solicitations on projects without goals. One MBE firm stated that the same prime contractors do not use him in both the private sector and the public sector. Another MBE indicated that they were targeted for subcontracting work because they are DBE. A WBE reported that, since January 2006, she is not getting any work based on her DBE status. Another WBE reported that, without DBE goals, she now has to go "head to head" against firms with more experience with ITD. However, other MBE/WBE engineering firms report being used as subconsultants regardless of whether DBE goals apply. MBE/WBE and majority-owned prime consultants report using DBE subconsultants on engineering contracts even when it is not required. Some MBE/WBE engineering firms say they make a point of using MBE/WBE subconsultants; others say that they just use them because they do good work.

Lists of potential subcontractors. The same lists available for construction are available to identify subconsultants for ITD engineering-related projects (see Section V). One WBE prime who was aware of the DBE Directory said that she didn't use it to find DBEs because Idaho is a small market and she knows who is available to perform subcontracts. Other firms reported that they were aware of the DBE Directory but had never seen one.

One MBE recommended that ITD do more to provide lists of DBEs to primes seeking subconsultants.

Good faith efforts. One MBE environmental consultant indicated that the firm had been asked to submit bids for subcontracting work on ITD projects but felt that these efforts were insincere. The prime contractors do not tell him the scope of the project and it seemed clear to him that the primes were not interested in using him.

Front companies. Several engineering-related firms reported knowledge of sham DBEs. For example one interviewee stated that he is aware of companies where the husband owns the company, but it is in his wife's name. A majority-owned engineering firm reported that this phenomenon is more prevalent with minority-owned businesses, particularly those operated by Native Americans.

One WBE engineering firm stated that she has heard of DBE fronts (husbands operating supposedly female-owned companies) but that ITD does a good job of sending someone out to interview the DBEs when they are trying to get certified.

Other barriers. One interviewee reported that it was difficult to get work in certain parts of the state because she was of a different religious background than the dominant culture in Southeast Idaho. This affected her ability to receive work as a subconsultant.

Stigma associated with DBE status. Several firms reported that there was a stigma associated with being a DBE. As one interviewee put it, the stigma is "you're small, you're in the DBE Program, and therefore you don't know what you're doing." He stated that prime contractors are skeptical that DBEs have the necessary expertise.

An MBE firm stated that there is a certain amount of animosity toward DBEs and other small businesses. He stated that he has never seen overt discrimination, but he could see it occurring covertly. He also stated that he has experienced stereotyping because "there is a requirement to use you."

Payment. Some firm owners reported that it took a long time to be paid as a subconsultant on an ITD engineering project. One WBE reported that ITD will pay a prime within 30 days of invoice but that it can take up to eight weeks to receive payment as a sub. "We don't know when ITD pays the primes so we don't know when the clock starts ticking. If ITD could tell us that would give us more leverage to know when to start calling the prime."

Other firm owners had favorable comments about payment on ITD contracts. Some interviewees reported that they preferred public sector work because of the risks of not being paid in the private sector.

ITD technical assistance. As with construction firms (reported in Section V), a number of MBE/WBE engineering firms reported that they are aware of and appreciate ITD technical assistance efforts. One MBE said that Idaho has the best outreach of any state. Even if firms had not participated in a particular opportunity, they were impressed that ITD offered these services. Some interviewees were aware that funding had been cut off for certain ITD programs (e.g., certain reimbursements).

Effect of DBE Contract Goals on Utilization

As with construction subcontracts in Section V, BBC examined MBE/WBE and DBE utilization as subconsultants on engineering-related projects with and without DBE contract goals.

Federally-funded and state-funded subcontracts. BBC analyzed utilization for 832 subcontracts from federally-funded contracts and 62 subcontracts from state-funded contracts across the entire study period. Figure VII-1 reports the results of these analyses.

On federal contracts, minority- and women-owned businesses received 20 percent of all subcontract dollars. Most of the dollars going to an MBE or WBE went to a certified DBE firm. On state-funded contracts, MBE/WBEs received about 12 percent of total subcontracting dollars. Certified DBEs also received most of the subcontract work going to MBE/WBEs on state-funded contracts.

Figure VII-1.
MBE/WBE share of subcontract dollars for transportation engineering contracts, federal vs. state funding 2002-2006

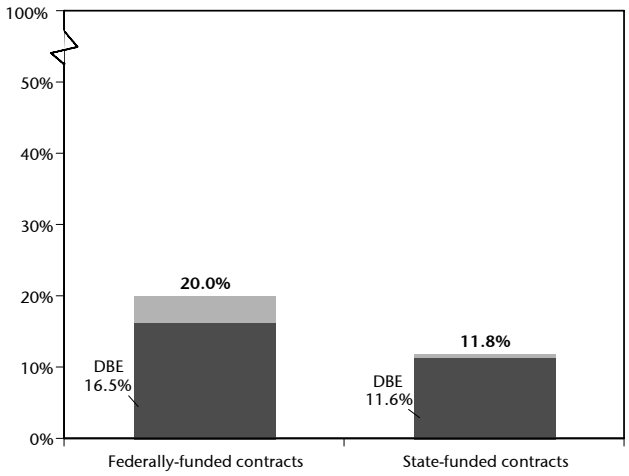
Note:

For more detail and for results by MBE/WBE group, see Figures E-62 and E-104 in Appendix E.

832 federally-funded and 62 state-funded contracts.

Source:

BBC Research and Consulting from data on ITD contracts.



Utilization of firms by race and gender group. Women-owned firms received 13.8 percent of subcontract dollars on federally-funded contracts and 8.5 percent of subcontract dollars on state-funded contracts. The only minority group to receive substantial subcontract dollars were Hispanic American-owned firms (about 5 percent on federally-funded contracts and 3 percent for state-funded contracts). Figure VII-2 presents these results.

Figure VII-2.
DBE and MBE/WBE share of subcontract dollars for transportation engineering contracts, by race/ethnicity/ gender

Note:

Numbers rounded to nearest tenth of 1 percent.

For more detail, see Figures E-62 and E-104 in Appendix E.

832 subcontracts federally-funded and 62 for state-funded contracts.

Source:

BBC Research and Consulting from data on ITD contracts.

	Federally-funded contracts	State-funded contracts
MBE/WBEs		
African American-owned	0.0%	0.0%
Asian-Pacific American-owned	0.4	0.0
Subcontinent Asian American-owned	0.8	0.0
Hispanic American-owned	4.8	3.3
Native American-owned	0.2	0.0
Total MBE	**6.2%**	**3.3%**
WBE (white women-owned)	13.8	8.5
Total MBE/WBE	**20.0%**	**11.8%**
DBEs		
African American-owned	0.0%	0.0%
Asian-Pacific American-owned	0.0	0.0
Subcontinent Asian American-owned	0.8	0.0
Hispanic American-owned	4.6	3.3
Native American-owned	0.1	0.0
Total MBE	**5.5%**	**3.3%**
WBE (white women-owned)	11.0	8.3
White male-owned DBE	0.0	0.0
Total DBE	**16.5%**	**11.6%**

Disparity Analysis

The overall rate at which MBE/WBEs are utilized as subconsultants exceeds the expected level given availability for federally-funded engineering contracts, but is below the expected level for state-funded engineering contracts.

Federally-funded and state-funded subcontracts. Figure VII-3 examines disparity indices for subcontracts on both federally- and state-funded engineering contracts. On federally-funded contracts, WBEs received subcontract dollars somewhat exceeding what would be expected from WBE availability (disparity index of 110). BBC found a disparity between WBE utilization and availability for subcontracts on state-funded engineering contracts (disparity index of 66).

There were disparities for each minority group except for Hispanic American-owned firms for subcontracts on both federally- and state-funded engineering contracts. Hispanic American-owned firms received more subcontract dollars than expected for both federally- and state-funded contracts.

Figure VII-3.
Disparity indices for MBE/WBE utilization on federally- and state-funded transportation engineering subcontracts, 2002–2006

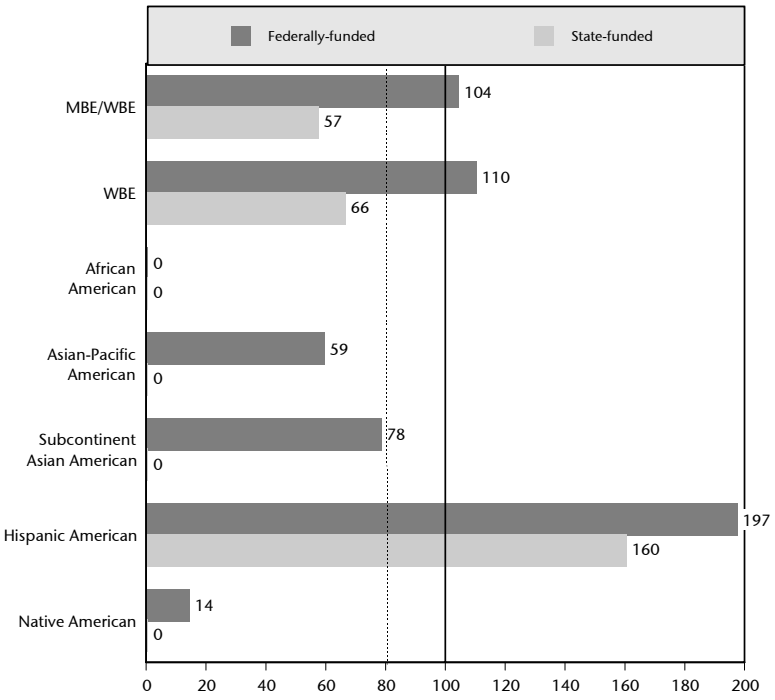
Note:

For more detailed information, see Figures E-62 and E-104 in Appendix E.

832 subcontracts for federally-funded and 62 subcontracts for state-funded contracts.

Source:

BBC Research and Consulting.



Federally-funded RFPs versus federally-funded term agreements. DBE project goals were typically only applied for federally-funded contracts issued through a Request for Proposal (RFP) process. ITD discontinued setting DBE contract goals for these contracts in January 2006. To better isolate the influence of DBE project goals on MBE/WBE utilization, BBC divided federally-funded contracts into two groups:

1. Contracts let through an RFP process for 2002 through January 2006; and

2. Work awarded through other means, including task orders off of term agreements through January 2006, plus all federally-funded contracts from February through December 2006.

Results are shown in Figure VII-4:

- Utilization of WBEs exceeded availability of contracts for which DBE goals could be set, and utilization of WBEs was substantially below availability for subcontracts on ITD work without DBE goals.
- There were disparities for African American-, Asian-Pacific American- and Native American-owned firms for subcontracts on both sets of federally-funded contracts.
- Utilization of Hispanic American-owned firms exceeded availability.
- There were mixed results for Subcontinent Asian American-owned firms.

On balance, this analysis of two subsets of federally-funded contracts confirms results from BBC's analysis of federally-funded versus state-funded contracts.

Figure VII-4.
Disparity indices for MBE/WBE utilization on federally-funded transportation engineering subcontracts, RFPs 2002–Jan. 2006 versus other contracts, 2002–2006

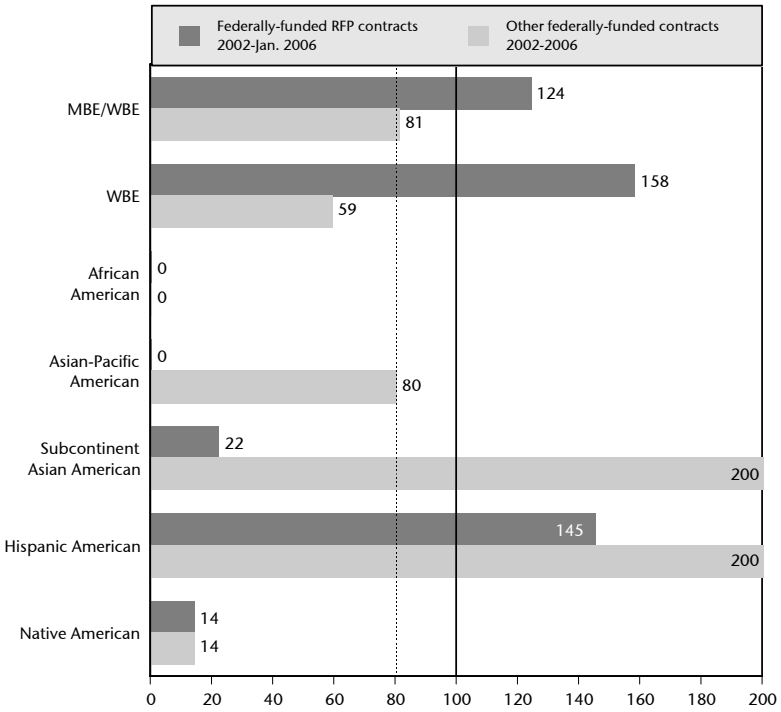
Note:

For more detailed information, see Figures E-70 and E-77 in Appendix E.

209 subcontractors for RFPs 2002-Dec. 2006 and 623 subcontracts for other contracts.

Source:

BBC Research and Consulting.



Conclusions for Engineering Subconsulting

BBC provides the following conclusions from review of information on engineering subconsulting.

1. Several interviewees were concerned about limited opportunities for MBE/WBEs as subconsultants on ITD engineering-related contracts after ITD discontinued setting DBE contract goals. BBC concluded from analysis from subconsultant use on state-funded engineering work and federally-funded term agreements that MBE/WBE utilization is relatively low for projects without DBE contract goals. Because ITD included information on anticipated levels of DBE participation on RFPs after January 2007, BBC was unable to assess the impact of this initiative on MBE/WBE utilization (BBC's analysis of ITD utilization extends through December 2006).

2. The past DBE goals program and ITD's technical assistance efforts have assisted minority- and women-owned firms in breaking into subconsulting relationships with larger engineering firms (based on the study team's interviews with business owners.

3. Many businesses reported that it was difficult to identify potential subconsulting opportunities on ITD engineering work, especially for non-RFP work.

4. Slow payment was identified as an issue.

ITD should consider the following program elements related to engineering subconsulting:

- Continue strong technical assistance efforts for minority- and women-owned firms;
- Develop systems to better identify and communicate ITD engineering opportunities in advance;
- Automatically inform subconsultants when prime consultants have been paid;
- Require prime consultants competing for certain term agreement categories to include subconsultants as part of a team submission (and encouraging DBE participation among subconsultants);
- Periodically hold mandatory pre-proposal conferences where subconsultants can introduce themselves to prime consultants;
- On certain RFPs, set minimum percentages of work that prime consultants must subcontract out and encourage use of small businesses on theses subcontracts; and
- Monitor individual prime's use of minority- and women-owned subconsultants on ITD work and further investigate certain prime consultants when warranted.

These conclusions are influenced by the results from BBC's analysis of MBE and WBE utilization as prime consultants on ITD engineering-related contracts (Section VIII). ITD's primary focus in encouraging MBE/WBE participation in engineering contracts should be as prime consultants not as subconsultants where work volume is quite limited.